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ISIS-PHARMACEUTICALS

+ HOWSON & HOWSON 006/007

PTO/SB/80 (08-04)

Approved for use through 11/30/2005. OMB 0651-0035
 U.S. Patent and Trademark Office, U.S. DEPARTMENT OF COMMERCE

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POWER OF ATTORNEY TO PROSECUTE APPLICATIONS BEFORE THE USPTO

I hereby appoint:

☒ Practitioners associated with the Customer Number:

36441

OR

☐ Practitioner(s) named below (if more than ten patent practitioners are to be named, then a customer number must be used):

Name	Registration Number

as attorney(s) or agent(s) to represent the undersigned before the United States Patent and Trademark Office (USPTO) in connection with any and all patent applications assigned only to the undersigned according to the USPTO assignment records or assignment documents attached to this form in accordance with 37 CFR 3.73(b).

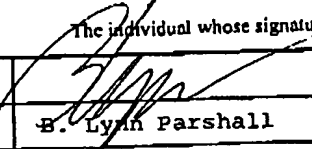
Assignee Name and Address:

ISIS Pharmaceuticals, Inc.
 2292 Faraday Avenue
 Carlsbad, California 92008

A copy of this form, together with a statement under 37 CFR 3.73(b) (Form PTO/SB/96 or equivalent) is required to be filed in each application in which this form is used. The statement under 37 CFR 3.73(b) may be completed by one of the practitioners appointed in this form if the appointed practitioner is authorized to act on behalf of the assignee, and must identify the application in which this Power of Attorney is to be filed.

SIGNATURE of Assignee of Record

The individual whose signature and title is supplied below is authorized to act on behalf of the assignee

Signature		Date	10-29-2004
Name	B. Lynn Parshall	Telephone	
Title	Executive Vice President		

This collection of information is required by 37 CFR 1.31 and 1.33. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 3 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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PTO/SB/06 (09-04)

Approved for use through 07/31/2006. OMB 0651-0031

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STATEMENT UNDER 37 CFR 3.73(b)Applicant/Patent Owner: ISIS Pharmaceuticals, Inc.

Application No./Patent No.: _____ Filed/Issue Date: _____

Entitled: Antisense Modulation of Extracellular-Signal-Regulated Kinase-6 Expression

ISIS Pharmaceuticals, Inc., a corporation
 (Name of Assignee) (Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

states that it is:

1. ☒ the assignee of the entire right, title, and interest; or
2. ☐ an assignee of less than the entire right, title and interest.
 The extent (by percentage) of its ownership interest is _____ %

in the patent application/patent identified above by virtue of either:

- A. ☐ An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office at Reel _____, Frame _____, or for which a copy thereof is attached.

OR

- B. ☐ A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as shown below:

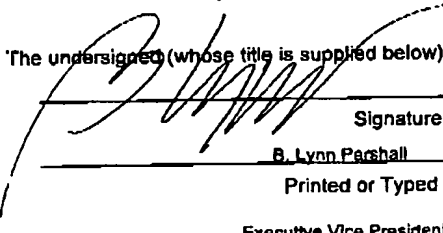
1. From: _____ To: _____
 The document was recorded in the United States Patent and Trademark Office at Reel _____, Frame _____, or for which a copy thereof is attached.
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☐ Additional documents in the chain of title are listed on a supplemental sheet.

- ☒ Copies of assignments or other documents in the chain of title are attached.

[NOTE: A separate copy (i.e., a true copy of the original assignment document(s)) must be submitted to Assignment Division in accordance with 37 CFR Part 3, if the assignment is to be recorded in the records of the USPTO. See MPEP 302.08]

The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.



 Signature
B. Lynn Parrish

 Printed or Typed Name

 Executive Vice President

 Title

10-29-2004

Date

Telephone Number

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PTO/SB/01 (08-03)

Approved for use through 07/31/2008. OMB 0851-0032

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**DECLARATION FOR UTILITY OR
DESIGN
PATENT APPLICATION
(37 CFR 1.63)**Declaration
Submitted
With Initial
Filing

OR

Declaration
Submitted after Initial
Filing (surcharge
(37 CFR 1.16 (e))
required)

Attorney Docket Number

PTS-0055USA

First Named Inventor

Bennett et al.

COMPLETE IF KNOWN

Application Number

unassigned

Filing Date

Herewith

Art Unit

unassigned

Examiner Name

unassigned

I hereby declare that:

Each inventor's residence, mailing address, and citizenship are as stated below next to their name.

I believe the inventor(s) named below to be the original and first inventor(s) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

Antisense Modulation of Extracellular Signal Regulated Kinase-6 Expression

(Title of the Invention)

the specification of which



is attached hereto

OR



was filed on (MM/DD/YYYY)

as United States Application Number or PCT International

Application Number

and was amended on (MM/DD/YYYY)

(if applicable).

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment specifically referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application.

I hereby claim foreign priority benefits under 35 U.S.C. 119(a)-(d) or (f), or 365(b) of any foreign application(s) for patent, inventor's or plant breeder's rights certificate(s), or 365(a) of any PCT international application which designated at least one country other than the United States of America, listed below and have also identified below, by checking the box, any foreign application for patent, inventor's or plant breeder's rights certificate(s), or any PCT International application having a filing date before that of the application on which priority is claimed.

Prior Foreign Application Number(s)	Country	Foreign Filing Date (MM/DD/YYYY)	Priority Not Claimed	Certified Copy Attached?	
				Yes	No
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
				<input type="checkbox"/>	<input type="checkbox"/>
				<input type="checkbox"/>	<input type="checkbox"/>
				<input type="checkbox"/>	<input type="checkbox"/>

☐ Additional foreign application numbers are listed on a supplemental priority data sheet PTO/SB/02B attached hereto.

[Page 1 of 2]

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PTO/SB/01 (08-03)

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DECLARATION — Utility or Design Patent Application

Direct all correspondence to: <input checked="" type="checkbox"/> Customer Number: <u>38441</u>		OR <input type="checkbox"/> Correspondence address below	
Name HOWSON AND HOWSON, Mary E. Bak			
Address P.C. Box 457			
City Spring House		State Pennsylvania	ZIP 19477
Country USA	Telephone 215-540-9200	Fax 215-540-5818	
I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.			
NAME OF SOLE OR FIRST INVENTOR:		<input type="checkbox"/> A petition has been filed for this unsigned inventor	
Given Name (first and middle (if any)) <u>C. Frank</u>		Family Name or Surname <u>Bennett</u>	
Inventor's Signature <u>C. Frank Bennett</u>		Date <u>11-28-01</u>	
Residence: City <u>Carlsbad</u>	State <u>CA</u>	Country USA	Citizenship US
Mailing Address 1347 Cassins Street			
City CARLSBAD	State California	ZIP 92009	Country USA
NAME OF SECOND INVENTOR:		<input type="checkbox"/> A petition has been filed for this unsigned inventor	
Given Name (first and middle (if any)) <u>Kenneth W.</u>		Family Name or Surname <u>Dobie</u>	
Inventor's Signature <u>Kenneth W. Dobie</u>		Date <u>10/28/04</u>	
Residence: City <u>Del Mar</u>	State <u>CA</u>	Country USA	Citizenship UK
Mailing Address 703 Stratford Court, #4			
City Del Mar	State California	ZIP 92014	Country USA
<input checked="" type="checkbox"/> Additional inventors or a legal representative are being named on the <u>1</u> supplemental sheet(s) PTO/SB/02A or 02LR attached hereto.			

PTO/SB/02A (08-03)

Approved for use through 08/31/2003. OMB 0851-0032

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DECLARATION**ADDITIONAL INVENTOR(S)**

Supplemental Sheet

Page 3 of 3

Name of Additional Joint Inventor, If any:		<input type="checkbox"/> A petition has been filed for this unsigned inventor	
Given Name (first and middle (if any))		Family Name or Surname	
Eric S.		Marcussen	
Inventor's Signature <i>Eric S. Marcussen</i>		Date 10/29/04	
San Diego	California	USA	US
Residence: City	State	Country	Citizenship
8368 Caminito de Pastel			
Mailing Address			
Mailing Address			
San Diego	California	92111	USA
City	State	Zip	Country
Name of Additional Joint Inventor, If any:		<input type="checkbox"/> A petition has been filed for this unsigned inventor	
Given Name (first and middle (if any))		Family Name or Surname	
Inventor's Signature		Date	
Residence: City	State	Country	Citizenship
Mailing Address			
Mailing Address			
City	State	Zip	Country
Name of Additional Joint Inventor, If any:		<input type="checkbox"/> A petition has been filed for this unsigned inventor	
Given Name (first and middle (if any))		Family Name or Surname	
Inventor's Signature		Date	
Residence: City	State	Country	Citizenship
Mailing Address			
Mailing Address			
City	State	Zip	Country

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